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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/826,321	04/19/2004	Craig A. Branch	026746.101-US01	1066
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EXAMINER LAMPRECHT, JOEL				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/826,321

Applicant(s)

BRANCH ET AL.

Examiner

JOEL M. LAMPRECHT

Art Unit

3737

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 June 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26, 28-30 and 33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-26, 28-30, 33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-8508)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 33 of the disclosed invention is inoperative and therefore lacks utility. Regarding claim 33 as listed, there is not possible way to prevent all RF signals which could possibly interfere with an NMR measurement from passing from an area outside an RF shield to an area inside the RF shield.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-26, 28-30, and 33 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Regarding claim 1, the refinement of the relation of the holder to the unclaimed cryostat end-surface renders the claim indefinite as it is unclear exactly how the holder is configured to relate to an unclaimed element of the claim.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by Hoult et al. '278 (US Patent 5,735,278). Hoult et al. teach a system for providing RF shielding comprising: a holder or canopy comprising holder-RF shielding (see Col 10, Line 15-50). Element 72 discloses a protective covering and layer 71 of Figure 8 discloses a magnet comprising magnet-RF-shielding (Col 10 Line 15-24, and also Col 10 Line 36-44). The combination of the holder-RF-shielding and the magnet-RF-shielding to form a substantially complete RF shield. The entirety of the holder comprises RF shielding and therefore inherently the bottom and canopy would comprise RF shielding including the bottom portion of the table itself which would comprise a rigid portion.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 4-26, and 28-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoult et al.'278 (US Patent No. 5,735,278) in view of Palkovich et al.'217 (US Patent No. 5,012,217). Hoult et al.'278 teach a system for providing RF shielding comprising: a holder or canopy comprising holder-RF-shielding (see col. 10, lines 15-50; and particularly referring to element 72 or electrically conductive fabric bag; note that as evidenced by the Merriam-Webster definitions a canopy is a protective covering); and a magnet comprising magnet-RF-shielding (see layer 71 of Figure 8 which is the magnet RF shielding and see col. 10, lines 15-24) and also see col. 10, lines 36-44; referring to the combining of the holder-RF-shielding and the magnet-RF-shielding to form a substantially complete RF shield. The whole holder includes RF shielding and therefore inherently any of its sub-parts such as the bottom portion would necessarily include RF shielding. Finally, Hoult et al. discloses an apparatus which is capable of abutting and adjoining at least partially to the patient end of a magnet to match up to and provide RF-shielding. Hoult et al. '278 does not explicitly teach that the magnet itself comprises RF shielding, meaning that there is no explicit recitation that the magnet has sufficient RF shielding in that it is a superconducting magnet with an inner diameter having a cryostat made of radio-opaque material. In the same field of endeavor, Palkovich et al. '217 teaches the magnet itself comprises RF shielding, meaning that the magnet has sufficient RF shielding in that it is a superconducting magnet with an inner diameter having a cryostat made of radio-opaque material (see

col. 6, lines 4-12 and col. 6, lines 53-61; wherein iron is radio-opaque) and is capable of providing an RF shield which encloses all the magnets and coils. It would have been obvious to one skilled in the art at the time that the invention was made to have modified Hoult et al. '278 and incorporated the teaching of Palkovich et al. '217 of using his particular magnet arrangement with the cryostat in order to increase the RF shielding of the system (see col. 6, lines 53-61 indicating a four-fold increase of the shielding factor).

Hoult et al. '278 teach the locomotion of a patient into the imaging volume as indicated in figure 8 having wheels or rollers as indicated. Hoult et al. '278 further teach the use of an RF antenna on the patient support unit as indicated by element 18 in Figure 8 (also see col. 5, lines 20-22).

The opening of the canopy is interpreted as the aperture, which connects the two parts of shielding, the holder and the magnet. It would have been obvious to have combined the Palkovich reference with the RF shielding system of Hoult et al for the purpose of providing a magnet which is not merely *associated* with RF shielding, but which contains additional shielding for prevention of unnecessary electromagnetic fields during a procedure.

Response to Arguments

Applicant's arguments filed 6/12/08 have been fully considered and are responded to below. Regarding the argument that there is no recitation to form a substantially complete and continuous RF shield with respect to a magnet, Examiner

notes that the relationship of the holder to the magnet is unclear as it is described in relation to an unclaimed portion of the disclosure. Should Applicant wish to overcome this deficiency, the recitation of the magnet and patient-end surface of the magnet is required to complete the relationship and give it full weight on the merits.

Applicant has not responded to the outstanding 101 rejection of dependent claim 33. It is respectfully requested that Applicant do so in the forthcoming response as Examiner has accepted that the lack of a response is due to a minor oversight on part of Applicant.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOEL M. LAMPRECHT whose telephone number is (571)272-3250. The examiner can normally be reached on Monday-Friday 8:30AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian L. Casler can be reached on (571)272-4956. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JML

/BRIAN CASLER/

Supervisory Patent Examiner, Art Unit 3737